Using video in the ESL classroom R.T. Williams and Peter Lutes

ESLクラスにおけるビデオの使用

この論文はESL(第2外国語としての英語)クラスにおけるビデオの使用について論じる。人口に膾炙した(or一般に受け入れられている)学習原理がいかにビデオの使用によって支えられ高められるか、さらに生徒の学習意欲を刺激しモチベーションを与えるためにビデオを如何に使うべきか、を著者は論じ、2様の研究によってモチベーションにおけるビデオの効果を検証したうえ、ビデオ教材使用のための理論的根拠を敷衍するものである。

Abstract

This paper considers the use of video in the ESL classroom. The authors discuss how commonly accepted principles of learning are supported and enhanced by video use, and how video can be used to stimulate and motivate students to learn English. Two separate studies examine the effect of video on motivation, and lend support to the theoretical basis for using video materials.

Keywords: ESL, Video, Multimedia, Motivation, Classroom, Learning, Technology

1.1 Introduction

The advent and proliferation of newer technologies such as video playback devices and personal computers have allowed for the widespread use of these media of instruction. Though video and other multimedia have been around since the late 1960's, it is the recent drop in costs that have made these kinds of materials a practical possibility in a wide variety of classrooms. As such, more and more educators have come to look these tools as media of instruction. However, the lack of active research in this area has left video materials largely at the anecdotal level with teaching ideas being exchanged through workshops and similarly focused practical venues. This study looks at the theoretical impact of video on learning. It also presents and discusses two studies on the impact of video in the classroom.

1.2 Video in the ESL classroom

In second language education, video materials have proved especially useful for a number of reasons. Primarily, these materials provide students with the opportunity to experience the target language in a more natural context. Language is presented in an apparently less structured way. Through the use of video materials, English as a second language (ESL) students are afforded the opportunity to observe and participate in a more active learning experience, while maximizing the use of several cognitive skills.

1.3 Background

It is generally recognized and accepted that learners should be presented with a diversity of learning experiences based on varying methodologies in order to maximize the acquisition of knowledge. Moreover, learners should be provided with many opportunities to interact with the environment (Jonassen, 2000). Through the use of multimedia in the classroom, especially in the form of video materials, students are able to experience native speakers (NS) using the language at various levels where they might normally be impeded or constrained from doing so. Video materials can help to overcome obstacles to interaction such as physical location and the lack of opportunities to meet NS.

ESL educators have the responsibility to provide students with certain skills that will allow them to succeed in their studies, to acquire skills and knowledge in English, and to be able to articulate that knowledge in English (Kasper, 1999). As such, educators need to help students make a connection between what they are studying in the classroom and the application to real life or real world situations. This is one example of how multimedia based programs can be an effective transitionary tool.

2 Why use video in the classroom?

Using new technologies simply because they are available or cost effective is not a particularly good rationale for incorporating them as teaching tools. However, this can occur when the theoretical rationale for adding components is not explored. In determining whether to use video in the classroom, a consideration of the principles of

learning and the impact of video on the learning process is in order.

2.1 Principles of Learning

Alessi and Trollip (2001) conclude that there are 4 steps to transferring and acquiring knowledge: (a) perception and attention, (b) encoding, (c) memory, and (d) comprehension.

Perception and attention have to do with focusing on the information within the learning environment. Learners use their senses to accumulate information. Difficulties arise because human beings are constantly being bombarded by different stimuli. In a typical classroom environment, educators must maintain a certain level of attention of the learners in order to facilitate the transfer of information. One way that educators maximize this effect is by making changes in activities and delivery styles throughout the course of any particular lesson.

Encoding is the next step in the process of learning. The information that has been perceived must then be encoded for storage in the brain. In the ESL classroom environment, encoding has traditionally been conducted through aural stimuli. However, "dual coding", using both aural and visual encoding, has been proven to enhance encoding process by learners (Clark & Paivio, 1991). Mayer (1997) coined the term "multimedia effect" to explain the use of a combination of visual and aural information in order to affect learning.

The next step in the learning process, memory, is the learner's ability to recall the information that they have acquired and stored. There are two major principles that are the basis for the process of memory augmentation: the principle of organization and the principle of repetition (Fleming & Levie, 1978). The organization principle states that information is retained better and longer if it is organized, while the repetition principle states that information that is practiced or used is more easily committed to long-term memory. Alessi and Trollip (2001) conjecture that organized information is more important than repetition, even though it is sometimes inconvenient to use, especially when dealing with large amounts of information. In the ESL environment, a good example would be that vocabulary is often repeated in order to enhance memory.

Still, a combination of both of these principles is more effective, especially when organization is the most appropriate method to use.

Comprehension, the final step in the learning process, is a major goal of any teaching syllabus. Thus, educators strive to develop language and learning skills so that students are able to add the learned information to their current knowledge. Traditional testing techniques are simply ways to elicit recall of information. However, Alessi and Trollip (2001) have illustrated that this is simply the first step toward comprehension. Educators must build opportunities that will allow students to demonstrate that they can use the information that they have acquired and facilitate the desired behavior. Video is one of the new tools that have become available to educators to impact the learning process.

3 The impact of video materials on the learning process

Video materials have an advantage because of the innovative features that can be used to make instruction more appealing to learners. However, there is a danger of overuse in that many of these features are interesting only because they are new and fresh and may lose their appeal as learners become more accustomed to them. (Keller & Suzuki, 2004).

A major advantage is that video materials can focus on information that cannot be readily presented in a traditional classroom because of constraints such as size, location, costs, etc. In the ESL classroom, this can be something as simple as access to NS language in a natural context. However, because watching video is a passive activity, it needs to be used as part of an active learning strategy in order to be an effective tool, particularly in holding the attention of students (Houston, 2000; Sherman, 2004). Since "dual coding" has been proven to enhance encoding by learners, video materials are an effective delivery system because they contain a combination of visual and aural information.

If video materials are used as a part of an active learning strategy, they can have a major impact by presenting the same target structures and vocabulary in a new medium that allows for more repetition of the target language before learner attention is diverted or lost. It is incumbent on the learning process that repetition be conducted and video materials offer another avenue of options.

Video materials are an excellent method of exposing language learners to language used in a wide variety of contexts because of the variety of selections available. They offer a chance for language learners to test their comprehension in situations that they might encounter that cannot be otherwise realistically recreated in the classroom. Furthermore, video materials can be used to give learners a chance to demonstrate their comprehension. Video materials in the ESL classroom have the potential to maximize students' natural abilities to acquire, process, and otherwise utilize their knowledge. Moreover, they can be used to actively engage students in the learning process. Students can be encouraged to take on the role of the educator through active learning techniques utilizing video materials.

Active learning is a cognitive approach to learning that allows students to play an active role in their education. Students not only learn through observation, but also through participation in the process of learning. Instructional media technologies have enhanced the educational process by allowing students to access information, develop and apply this information, and communicate more with other students, thereby making the whole process more active (Mai, 2007).

The advantage of using video in the classroom is that students have the opportunity to observe more authentic materials. Most ESL textbooks are based on learning certain principles of grammar, structure, and patterns, with an application exercise at each level, and are often filled with sample conversations that allow L2 learners to practice the important points practiced in previous drills. By using video, especially in the form of episodic television, commercials, or movie scenes, a level of authenticity can be added to what the students are learning. This is accomplished by allowing students to see aspects of communication such as body language, gestures, context clues, cultural symbols, etc. Moreover, especially when used in conjunction with or supplemental to the standard ESL textbooks and materials, a deeper understanding of the target language can be reinforced.

4 Motivation

Motivation is a key element in the learning process. It is a factor that must be considered and maintained throughout any lesson, and throughout a course or program. A well-planned and executed curriculum developed according to sound theoretical methodology and instructional methods still hinges on the ability of the instructor to motivate learners, in order to be successful. If the students lack motivation or the instructor is unable to motivate them and maintain a certain level of motivation, any attempt to lead students through all the phases of learning will result in failure.

Motivation factors can be divided into two broad groups, extrinsic and intrinsic. Lepper and Malone have focused on distinguishing between extrinsic and intrinsic motivators (Lepper & Chabay, 1985; Malone, 1981; Malone & Lepper, 1987). Extrinsic motivators are considered to be independent of the instruction, and have no direct relationship to the content of the lesson itself. Extrinsic motivation is a somewhat controversial issue. There have been studies both for and against their use (Cameron & Pierce, 1994; Kohn, 1996; Lepper, Keavney, & Drake, 1996; Ryan & Deci, 1996).

Conversely, intrinsic motivators are actually inherent to the instruction. Keller (1984) states that interest in a lesson is a main factor in motivation where a learner's curiosity is aroused and maintained. It is this kind of focus on engaging classroom activities where instructors can motivate their students. Crookes and Schmidt (1989) note that a variety of classroom activities is one factor in nurturing intrinsic motivation. Intrinsic interest in specific classroom activities or tasks may be most easily influenced by teachers than other types of motivation, and as such must be considered in lesson planning and course design.

It is important to vary and even change intrinsic motivators from time to time. This is because individual students respond to different types of motivation, requiring a certain amount of individualization. Moreover, the same students will sometimes respond to different types of motivators in different environments. An effective method would be to try and utilize many motivators in each stage of instruction. Alessi & Trollip (2001) recommend certain techniques to enhance intrinsic motivation. They list some of these techniques:

- · Use game techniques.
- Use embellishments (such as visual techniques) to increase learner intensity of work or attention and to encourage deeper cognitive processing.
- Use explanatory environments.
- Give the learner personal control.
- Challenge the learner.
- Arouse the learner's curiosity.
- Give encouragement even when errors are made.

Video offers instructors the opportunity to utilize many of these and other motivators in the classroom, without much additional effort. Many researchers stress the importance of also considering relevance as a factor to include along with other motivators when designing multimedia lessons (Alessi & Trollip, 2001; Keller & Suzuki, 2004). Basically, if the relevance of what students are studying is not apparent to students, motivation will be hampered. Certainly, there are some motivational factors that are controllable. Instructional designers need to consider intrinsic motivators so that they can capitalize on them when using video in the classroom. At the same time, it is important to understand and use controllable motivators in ways that will improve the lesson and enhance student learning.

5 Research

Two studies were conducted to assess the impact of video materials upon the student attitudes and specifically how it pertains to motivation.

5.1 The impact of video on interest and motivation in the ESL classroom

This quantitative study was designed to assess the impact of video in the ESL classroom. It addresses the question of whether the use of video has a positive effect on student interest and motivation?

5.1.1 Objectives

While video usage has increased in the ESL classroom, there is very little research

examining the effects on motivation. There seems to be a common belief that students do enjoy the video sessions among ESL instructors, but there has been very little research on this. This study was designed to establish the impact of video in the ESL classroom on student interest, and therefore on student motivation. Are students affected positively by the use of video in the classroom? Do students perceive these classes to be more interesting and as such are they more motivated when video is a major component of the lesson curriculum?

5.1.2 Methods

Two groups were established for the purpose of this study, a control group and a test group. Both groups were comprised of second year university students majoring in engineering. The subjects were members of four ESL classes, which were part of the breadth component of their required courses. All classes were comprised of 30 students. The members of the classes were decided randomly by the registrar's office when assigning students to the class. Both groups covered the same materials, but the test group had a video component added to the teaching materials. The course consisted of fifteen 90-minute classes. The test group used a video component in eight classes. The video materials used were the Grapevine Video 1, which consists of eight comedic sketches covering basic grammar patterns and functions. Both groups had the same instructor and followed the same curriculum, with the exception of the supplemental video component, and the same evaluation through tests and assignments.

A questionnaire was distributed to the 120 students at the end of the term. The questionnaires were identical. The questionnaire had several statements regarding the students' attitude towards the class and were asked to indicate their level of agreement or disagreement by selecting one response out of five possible responses: "Strongly agree", "Agree", "Neither agree nor disagree", "Disagree", or "Strongly disagree". For the purposes of statistical analysis, the responses were graded +2, +1, 0, -1 and -2, respectively.

The statements were:

1. I enjoyed the teaching materials.

- 2. The class was interesting.
- 3. I looked forward to class.
- 4. I prepared for the classes.
- 5. I would like to take a similar class again.

There was also a section where students could make any comments regarding the class.

5.1.3 Results

A total of 120 usable surveys (100%) were returned. The high rate of return was due to the fact that the surveys were completed in the final lesson and the survey was short, and easy to complete.

TABLE 1 T - Test

Statements	Group	-2	-1	0	+1	+2	N	Ave	SD		Validity
1. I enjoyed the teaching materials	С	6	6	24	17	7	60	0.22	1.106	*	045
	Т	4	6	12	24	14	60	0.63	1.149		.045
2. The class was interesting.	С	3	8	23	18	8	60	0.33	1.036		.168
	Т	3	5	25	6	21	60	0.62	1.195		.100
3. I looked forward to class.	С	4	6	23	20	7	60	0.33	1.036		.013
	Т	3	5	10	23	19	60	0.83	1.122		.013
4. I prepared for class.	С	6	12	24	12	6	60	0.00	1.105	*	.038
	Т	5	8	12	26	9	60	0.43	1.155		
5. I would like to take a similar class	С	4	8	26	15	7	60	0.22	1.043	*	.009
again	Т	3	5	12	25	15	60	0.73	1.087		

^{*} p < .05

The results from the T-test demonstrate a clear trend. Both the average and the SD are higher for the test group than for the control group. Statements 1, 3, 4, and 5 showed an increase in both the average and the SD of 0.41 and 0.43; 0.50 and 0.86; 0.43 and 0.50; 0.51 and 0.43 respectively. It should be noted that while Statement 2 also showed an increase of 0.29 and 0.59, p > .05. So there is no statistical difference

between the test and control group.

5.1.4 Discussion

Firstly, it should be recognized that both the control and test group generally had positive attitudes about their English classes. However, the test group showed generally less neutral attitudes and more positive ones. Statements 1, 3, 4 and 5 all indicate that the test group had a much more positive experience and reaction to the lessons. Students reporting they enjoyed the materials would seem conducive to better motivation. Moreover, a higher number of students in the test group indicated that they looked forward to class, were more likely to prepare for class and would like to take a similar class. These responses would lend support to the contention that the video was an intrinsic motivating factor, which not only served to motivate students in the class, but also influenced student behavior outside the classroom.

More significantly was that while the negative responses remained relatively stable, the neutral responses declined in the test group and were replaced by positive responses. This would seem to indicate that the video served to motivate and interest students who were may have been interested in the lessons. This is reflected again the comments section of the questionnaire. Not all students elected to make comments, but all comments for both the test group and control group were positive (39 and 20 respectively). Common comments were that the teacher was funny or interesting, however 14 member of the test group specifically mentioned the video as interesting. It can be concluded that students in the test group were more interested and more motivated to prepare for and take part in the lessons.

5.2 Overall student satisfaction to video based classes compared to non-video based classes.

5.2.1 Background

This qualitative study evaluates student interest and motivation toward using video in the classroom. University students were subjected to a certain number of entire class periods based solely around a video presentation. At the end of the course,

they were asked to describe their overall feelings about this format of conducting classes, compared to classes where video was not used.

5.2.2 Sample

A total of 30 students in three ESL classes at Takamatsu University were used in this research. The first group was composed 19 first year students in the Department of Child Development, the second group, 12 second year students in the Department of Business Administration and the third group, 9 first year students in the Department of Business Administration.

5.2.3 Procedures

During the course of one semester, the students attended class once a week for 15 weeks. Each class was 90 minutes in length. On or about the 4th, 8th, and 12th classes of the term, the students took part in a video lesson in place of their regular course book based lesson. The entire lesson time was focused on watching a video and activities related to that video.

At the end of the course, students were asked to comment on their overall impressions of the video lessons compared with the regular lessons.

5.2.4 Findings

Table 2 summarizes the students' comments about the lessons in general. Not all of the students were present for each of the three video lessons. However, every student was there for at least one of the video lessons. It must also be noted that some students made more than one comment.

TABLE 2 Words used by students to express their feelings about using video in the classroom.

Comment	Number			
Had more fun with video	21			
Video was more interesting	14			
Learned from the video	12			
Want to do it again	7			
Looked forward to it	7			
A little difficult	5			
Did not want to miss videos	3			
Difficult to "catch" the listening	3			
Want to watch a new movie	1			
Exciting	1			

5.2.5 Discussion

The results clearly show that student interest in the video lessons was significantly higher when compared to the standard lessons, utilizing only the standard course book. Moreover, students not only looked forward to the lessons, but also felt disappointed if they had to miss one of the lessons.

A significant number of students also stated that they felt that they actually learned something from the lessons. This points to the need for further research in this field. This study does not show if student attitudes and motivation might be affected by different teaching styles, or more video lessons per term.

Overall, students were more motivated to study in classes where video was used. Intrinsic motivational factors of using video came into play. Not only did students enjoy themselves, but they also found that they learned more through video.

6 Conclusion

An examination of the principles of learning theory validates the idea that video can be a powerful tool as an engaging delivery system, especially when used as part of an active learning approach. Video can also be an extremely effective intrinsic motivator. The results of the two classroom studies strongly support this and clearly show that video does have a significant and positive impact on student motivation and interest. This is consistent not only with the expectations from learning theory, but also with anecdotal experiences.

References

- Alessi, S. M., & Trollip, S. R. (2001). *Multimedia for learning: methods and development* (3rd ed.) Needham Heights, MA: Allyn & Bacon.
- Cameron, J., & Pierce, W. D.(1992). The debate about rewards and intrinsic motivation: Protests and accusations do not alter the results. *Review of Educational Research*, 66(1), 39-51.
- Clark, J. M., & Paivio, A.(1991). Dual coding theory and education. *Educational Psychology Review*, 3, 149-210
- Crookes, G., & Schmidt, R. (1989). Motivation: Reopening the research agenda. *University of Hawaii Working Papers in ESL*, 8, 217-256.
- Fleming, M., & Levie, W. H. (1978). *Instructional message design: Principles from the behavioral and cognitive sciences*. Englewood Cliffs, NJ: Educational Technology.
- Houston, C.(2000). Video usage and active learning strategies among community college faculty members. Community College Journal of Research and Practice, 24, 341-357.
- Jonassen, D. M. (2000). Revisiting activity theory as a framework for designing student-centered learning environments. In D. M. Jonassen & S. M. Land (Eds.), *Theoretical foundations of learning environments* (pp. 89-122). Mahwah, NJ: Lawrence Erlbaum Associates.
- Kasper, L. F. (1999). Print, film and hypertexts: A multimedia model for discipline-based ESL Instruction. *Teaching English in the Two Year College*, 26(4), 406-414.
- Keller, J. M. (1983). Motivational design of instruction. In C. M. Reigeluth (Ed.), *Instructional design theories and models: An overview of current status*. Hillsdale, NJ: Lawrence Erlbaum.
- Keller, J. M., & Suzuki, K.(2004). Learner motivation and E-learning design: A multinationally validated process. *Journal of Educational Media*, 29(3), 229-239.
- Kohn, A.(1996). By all available means: Cameron and pierce's defense of extrinsic motivators. Review of Educational Research, 66(1), 1-4.
- Lepper, M. R., & Chabay, R. W.(1985). Intrinsic motivation and instruction: Conflicting views on the role of motivational processes in computer-based education. *Educational Psychologist*, 20 (4), 217-230.
- Lepper, M. R., Keavney, M., & drake, M.(1996). Intrinsic motivation and extrinsic rewards: A commentary on cameron and pierce's meta-analysis. *Review of Educational Research*, 66(1), 5.32
- Mai, N.(2007). Learning with multimedia: Engaging students in constructivist learning [Abstract]. *International Journal of Instructional Media*, 34(2), 10.
- Malone, T. W.(1981). Toward a theory of intrinsically motivating instruction. *Cognitive Science*, 5, 333-369.
- Malone, T. W., & Lepper, M. R. (1987). Making learning fun: A taxonomy of intrinsic motivations for learning. In R. E. snow & M. J. farr (Eds.), *Aptitude, learning and instruction: III. Conative and affective process analysis* (pp. 223-253). Hillsdale, NJ: Lawrence Erlbaum.
- Mayer, R. E. (1997). Multimedia learning: Are we asking the right questions? *Educational Psychologist*, 32(1), 1-19.
- Ryan, R. M., & Deci, E. L.(1996). When paradigms clash: Comments on cameron and pierce's claim that rewards do not undermine intrinsic motivation. *Review of Educational Research*, 66(1), 33-38.
- Sherman, J. (2003). *Using authentic video in the language classroom*. Cambridge: Cambridge University Press.